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ABSTRACT

The effects of principal and teacher gender on high school teachers' evaluations of principal leadership and perceptions of their own power at personal, interpersonal, and organizational levels are explored in this report. Two research issues are addressed: (1) the extent to which teachers' evaluations of school leadership depend on the gender of both the teacher and the principal; and (2) the ways in which teachers' perceptions of their own power at all levels in the school are affected by their perceptions of their principals' leadership effectiveness. Data were drawn from the High School and Beyond database, a general survey of American schools. The sample consisted of 8,894 teachers (44 percent female) and 377 principals (10 percent female) in 377 public and private schools. The findings suggest strong support for the existence of interaction between teacher and principal gender. While female teachers viewed themselves as particularly empowered in women-headed schools in the areas of classroom control and collegiality, male teachers felt less empowered. Male teachers assessed female principals' leadership as relatively ineffective, whereas female teachers rated it above average. Both female and male teachers were found to be empowered in female-headed schools in terms of locus of control, self-efficacy, and influence over staff policy. Findings offer empirical support for the argument that the theory of negative self-fulfilling prophecy for women administrators is invalid; at the same time they highlight men's dislike of working for women. Eight figures and five tables are included. Appendices list details of variable construction and the means for individual component variables. (66 references) (LMI)

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Teachers and Principals: Gender-Related Perceptions of Leadership and Power in Secondary Schools

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Revised March 1991

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RUNNING HEAD: Teacher Power and Perceptions of Leadership

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Teachers and Principals: Gender-Related Perceptions of Leadership and Power in Secondary Schools

Abstract

This study explores the effects of the interaction between principal and teacher gender in high school teachers' evaluations of the principal's leadership and in subsequent perceptions of their own power at the personal, interpersonal, and organizational levels of their schools. A powerful pattern of results is discussed in terms of understanding the persistent underrepresentation of women in the high school principalship.

Introduction

The history of leadership in schools and of the role of gender in principal-teacher relationships has contributed to a current, persistent, and unfortunate situation. Secondary schools are almost entirely led by male principals (American Association of School Administrators, 1985), while about half of the teaching force in these schools is women (Lee & Smith, 1990). The process of gender stratification in administration occurs not only in the hiring practices, but before hiring as well. Organizational structures make it easier for men to express and act on aspirations for school administration, and harder for women to overcome stereotypes of being poorly suited for school administration (Schmuck & Wyant, 1981; Kanter, 1977; Shakeshaft, 1987). The evolution of these dynamics has been traced by historians and feminist scholars alike (Tyack & Strober, 1981; Ortiz, 1982). Any exposure to this history reveals that issues of school leadership and the gender of both principals and teachers are bound together tightly. Leadership in high schools exists in a context where gender carries a great deal of meaning.

We draw our definition of effective principal leadership from the effective schools literature. While it is generally conceded that leadership is contingent (i.e., that the *best* leadership depends on the situation), the literature on effective schools provides some consensus on the behaviors which constitute the best or most effective leadership in schools. Several reviews have suggested similar desirable behaviors from principals: (a) an emphasis on achievement for both students and teachers; (b) a clear vision for the school which is translated into specific expectations, goals, and procedures; (c) interventions to help teachers improve their teaching where necessary; and (d) coordination and integration of the school's instructional programs with overall goals to establish an environment which supports the school's vision (Purkey & Smith, 1983; Rosenholtz, 1985; Rutherford, 1985; Sweeny, 1982). The limited existing research on teachers' perceptions of effective leadership suggests that teachers opinions of what constitutes effective leadership are very similar to this list (e.g., Blase, 1987).

One consequence of this history may be that leadership behaviors are evaluated quite differently depending on the gender of both leader and

follower (Schein, 1975). Indeed, how teachers *view* their principals' leadership behavior may have stronger effects on teacher attitudes than objective behaviors which typify leadership (Halpin, 1966).

In the first part of this paper we demonstrate that perceptions of leadership vary not only between schools (as might be expected), but also within schools, particularly along gender lines -- with the gender of both teacher and principal having important effects on the teachers' perceptions of leadership in the school. The second part of the study examines the role that these perceptions of leadership play in teachers' perceptions of their own power within the school. Figure 1 presents a schematic representation of the two components of this study. Model A depicts the first component -- perceptions of effective leadership; Model B incorporates these perceptions of leadership into a full model exploring teacher power.

Insert Figure 1 about here

Bass (1981) elaborates the difficult choices involved in studying school leadership. On the one hand, leadership is most accurately studied through very sophisticated and complex research designs which take into account the climate of the school, the nature of the task, and a number of other situation-specific variables. On the other hand, simple studies avoid the possible misspecifications of complicated models, and allow examination of major effects. Cognizant of these tradeoffs, we have adopted the latter approach in investigating the research questions in the present study.

Background

Objective Vs. Subjective Assessments of Principal Leadership

Historical backdrop to the issue of gender in leadership. Since at least the early 1900s, gender has been quite pertinent in the subjective process of evaluating school leaders. A brief examination of this history suggests why men and women might develop different perspectives of male and female leaders. In the early twentieth century, female teachers banded together and spoke out on the need to bring women to educational leaderhip. The existing male-dominated social organization of education subtly thwarted these teachers' efforts at increasing women's representation. Men chose other men for the most powerful leadership positions, giving women

symbolic leadership roles in rural areas or as counselors (Tyack & Hansot, 1982). So, while women were convinced of their abilities to lead, men were in positions to keep women from these positions. By the 1950s, a general pattern in schools and other organizations found employees preferring to work for men than for women. Kanter (1977) explained these older research findings as demonstating that people prefer leaders who are likely to be powerful. Wheatley (1981) replicated Kanter's findings in school settings. In most organizational structures, since women were blocked from attaining the same resources as men, they were certainly less powerful (Pfeffer, 1981). The preference for male leaders was, thus, really a more general preference for more powerful leaders.

What male and female principals really do. Beginning with Mintzberg's (1973) study of managerial behavior, considerable research has detailed the objective behaviors and tasks of high school principals. Of particular importance to this study is the research focusing on differences in the leadership behaviors of male and female principals. Findings are fairly consistent. Female principals (both elementary and secondary) devote more of their workday to activities which connect them to teachers and students. A number of studies reviewed by Shakeshaft (1987), for example, all found that female principals spend more time than their male counterparts checking on classrooms and wandering the hallways. This tendency is reflective of a broad finding about the styles of men and women as leaders. A meta-analysis of gender differences in leadership found that the only consistent gender difference across studies was that women are more democratic or participative in their styles, while men are more autocratic or directive (Eagly & Johnson, 1990).

There are several types of relations between principals and the teachers and students in their schools. Compared to their male counterparts, female principals communicate more with teachers (Charters & Jovick, 1981) and have more interactions with both students and teachers (Fauth, 1984; Gross & Trask, 1976; Pitner, 1981). They also spend more time in the classroom or discussing the academic content of the school with teachers (Fauth, 1984; Gilbertson, 1981; Gross et al., 1976: Pitner, 1981). While the principal-specific literature reviewed here does not reflect the overall tendency for women to be more participative in their leadership than men, it does suggest that female principals are more invested in knowing the details of the lives of "their" teachers, students, and parents. In

general, this research supports Charters and Jovick's conclusion that female principals are "more prominently and personally involved in affairs related to the program of the school" than are male principals. (p.322)

None of these noted differences in the styles of men and women's leadership argue, however, that men are more *effective* principals than women. In fact, the literature frequently concludes that either there are no differences, or that women are more effective principals (Fishel & Pottker, 1977; Frasher & Frasher, 1979). In general, a democratic or participative leadership style is considered more effective than a hierarchical or autocratic style (Eagly & Johnson, 1990).

In sum, research on principals' objective leadership behaviors suggests that female principals are at least as effective as their male counterparts, but that leadership behaviors differ somewhat by gender. Female principals operate in close contact with the teachers, students, and parents of their schools, while male principals spend less time in direct contact with teachers and students.

What teachers' report about their principals. While objective investigations of the leadership behaviors of principals suggest that male and female principals are equally effective, we will build the argument here that teachers' subjective assessments of the effectiveness of principal leadership may vary greatly, even within schools, depending on the gender of the teachers and the principal.

Much of the empirical research on leadership in schools (and in organizations more generally) recognizes the importance of teachers' or employees' perceptions and reports of the nature of their leadership (see, e.g., Bass, 1981; Halpin, 1966; Maehr, 1987; Thompson, 1971). Subjective assessments of leadership are particularly important in regard to judgments of men and women in leadership positions (Nieva & Gutek, 1982). For example, gender stereotypes can give more meaning to situations than objective behavior or information, with the result that those who hold strongly stereotypic views interpret a person's behavior differently from those who don't. It has been demonstrated that people extract different meanings and perceptions about men and women even when they know that they exhibit the same behaviors (Heilman, Block, Martell, & Simon, 1989; Schein, 1975). Consequently, while the literature suggests that there is no clear difference in how men and women perceive objective supervisory behaviors (Nieva & Gutek, 1982), male and female teachers may still subjectively

evaluate the leadership of their own principals differently.

Although the importance of subjective assessments of principals' leadership is clear, the empirical research here is weak. That is, most research on this topic considers all teachers' reports of prinicpals' leadership in the aggregate (e.g., Gross & Trask, 1976). Unfortunately, such aggregation of results inhibits our ability to explore possible gender differences in most of the extant literature. Quite frankly, we cannot tell whether male and female teachers have evaluated the leadership of male and female principals in the same way in these studies (see Blase, 1987; Fishel et al., 1977; Gross & Trask, 1976).

The very few studies which have specifically examined female and male teachers' perceptions of female and male principals (Petty & Lee, 1975; Shareatpanahi, 1982) suggest that male teachers, in particular, may react against female principals, while female teachers may either prefer a female principal or have no preference. While research in non-educational contexts suggests a similar pattern (Brenner, Massengill & DeMarco, 1979; Schein, 1975; Tomkiewicz, & Schien, 1989), and theories accounting for such findings are myriad (Adkinson, 1981), a thorough review of this literature exceeds the scope of this paper. The present study improves on the few educational studies in this area in two ways. First, since this study uses a nationally representative sample of teachers and schools, it is more broadly generalizable than past work. Second, past studies have focused on teacher's work satisfaction as the sole outcome of perceptions of leadership. Here, we explore relationships between perceptions of leadership and teachers' power.

First research question. Our first purpose is to explore the empirical phenomenon of teachers' perceptions of principal leadership. While detailed accounts of such perceptions disaggregated by gender are quite uncommon in educational literature, the general organizational literature suggests that gender differences (of both leaders and employees) are important. The first component of this study (see Model A in Figure 1) thus investigates the effects of gender of both the teacher and the principal on teachers' perceptions of leadership, as well as the possible interation between the two. The research question guiding the first part of the study is:

- *To what degree do teachers' evaluations of the leadership in their schools depend on the gender of both the teacher and the principal?*

We hypothesize that male and female teachers' evaluations of their principals' effectiveness are affected by whether or not they work for male or female leaders. Specifically, we suggest that same-gender pairings will be seen as more effective, whereas cross-gender pairings will be perceived as less effective. Moreover, we suggest that these patterns will be more evident in the case of teachers working for female principals.

Motivating Teachers Through Three Levels of Teachers' Power

Gender differences in power within schools. The second component of this study investigates the effects of teachers' perceptions of leadership and the gender of both teacher and principal on the teachers' reports of their own power (characterized by Model B in Figure 1). Accounts of the dynamics of power in many organizations and schools reveal that organizational structures create very different power dynamics for men and women (Kanter, 1977; Wheatley, 1981). Careful studies of the power structures in schools make us suspect that the relationships between perceptions of leadership, gender of the principal, and the perceptions of power will vary among female and male teachers.

For example, teachers have historically maintained some power through isolating themselves from other teachers (Lortie, 1975). The classroom is their haven of autonomy. In the process of preserving automony, such isolation also prohibits teachers from exhibiting their capabilities. When opportunities for advancement arise in systems where most leadership positions are held by men, the men turn to those most like them. They turn to other male teachers who may be part of the same community social groups or quite visible in the school through such non-teaching activities as coaching. Therefore, under a male principal, maintainence of autonomy through isolation in their classrooms may serve male teachers better, while prohibiting women from attaining any further power in the schools (Ortiz, 1982). This scenario is just one example of the complications in relationships between principal and teacher gender where power dynamics are concerned. One may see here the potential relationship between power, gender, and perceptions of leadership.

Current discussions of teacher power are most often couched in the language of empowerment (Maeroff, 1988; McLaughlin, Talbert, & Bascia, 1990; Johnson, 1990). This perspective on power makes clear that teachers'

empowerment results in part from their experience of what they consider to be strong leadership. The teacher empowerment literature argues in favor of leaders who increase teachers' knowledge of expectations for their performance and for the school, who provide access to the resources they need to improve their teaching, and who protect (or buffer) teachers from attack from outside contingencies (Maeroff, 1988; Weick, 1976). While the concept of empowerment is potentially useful, it has thus far not been clearly defined in terms relative to broader conceptions of organizational and personal power.

Theoretical conceptualization of teacher power. Our aim here is to compare the current notion of teacher empowerment to more traditional conceptions of power. We also differentiate the broad concept of *teacher power* into different levels within the school organization . Three theoretical orientations characterize the literature on power. Broadly considered, the empowerment literature fits into one orientation, that we will call motivational power. The more traditional power and leadership literature is consistent with a second orientation, relational power. The third orientation is that power is not in limited supply, rather, it is an expanding pie. Figure 2 pictures these different orientations toward the concept of power.

Insert Figure 2 about here

Relational and expanding pie concepts of power suggest that power results from dependence between parties. In the former, one party has power over another, or has the ability to make a person do something he or she would not otherwise do (Cartwright, 1959). The latter suggests that power can be shared, and when it is, the total amount of power increases. The one who shares power does not lose any (Tannenbaum, 1968). A third conception of power is as motivational rather than relational (Conger & Kanungo, 1988). This motivation orientation is the predominant view in the concept of empowerment. The concern here is with feeling powerful (i.e., perception), so that power leads to behavior that would not have occurred otherwise. The felt power results in an expectation that a particular action or goal may be accomplished. In this motivational sense, power refers to an individual's intrinsic need for self-determination or belief in personal efficacy (Bandura, 1986; Conger & Kanungo, 1988; Deci, 1975).

The motivational conception of power is used in the present study to consider teachers' perceptions of their own power. While teachers' power may actually be exerted in the school to change other actors' behavior, we consider teachers' self-reports as measures of their *feeling* that they can affect occurrences in the school, not that they necessarily do. This may also be seen as inert power, a person's awareness of a power base, rather than a concern for the actual exploitation or use of power (Dahl, 1957).

Motivating power from multiple levels. Following Ragins and Sundstrom (1989), we suggest that motivational power is garnered from several levels in the organization. This view somewhat expands the concept of empowerment, since the literature has not considered that motivating power may come from different levels (an individual, a group, or the organization itself). Power may be garnered from the *individual level*, through self-efficacy (Dahl, 1957; Etzioni, 1961; Weber, 1947), from the *group level*, through interpersonal relations and coalitions (Cartwright, 1959; Pfeffer, 1981), or from the *organizational level*, through attaining certain organizationally defined roles (Mechanic, 1962; Mintzberg, 1983; Pfeffer, 1981).

Level 1: Personal power. When applied to high school teachers, we conceptualize the three levels of power as follows. First, individual-level power, which Ragins and Sundstrom (1989) describe as power independent of one's job, concerns the dispositions and skills of individuals. These might include political skill or expert power. For teachers, self-efficacy constitutes such a disposition. Another related variable is teachers' locus of control (Lee, Dedrick & Smith, 1991), which ranges from internal (the degree to which one feels that occurances are a result of one's actions) to external (the degree to which one feels occurances are entirely out of one's control). An internalized locus of control is equivalent to more individual-level power.

Level 2: Interpersonal power. Second, teachers gain power from interpersonal relationships. This involves "influence through rational persuasion, faith and personal identification" (Mechanic, 1962). This lateral or horizontal power means having influence over peers (Ragins & Sundstrom, 1989). For teachers, this includes power and resources gained simply by being supported by other teachers, or by serving as support for other teachers, either socially, or professionally. Here, collegiality serves as a measure of how teachers respect, and therefore influence, one another in a school.

Level 3: Organizational power. Finally, teachers, by merit of their role, have two kinds of legitimate authority or power within the organization: school and classroom. Within schools, teachers have some power to influence school policies. In the case of classroom power, teachers have some degree of direct power over students, over allotted rewards and punishments, over students' work environments, and over procedures (teaching method).

Second research question. Our research question in the second half of this study deals with gender differences in teachers' perceptions of power within their schools and classrooms. This second research question incorporates the findings from the first research question, concerning teachers' perceptions of the leadership of their principals. Specifically, we ask:

- *How are teachers' perceptions of their own power at all levels in the school -- organizational, interpersonal, and individual -- affected by their perceptions of their principals as effective leaders?*

Again, we hypothesize that teachers' evaluations of their own power at every level vary according both to their own gender and the gender of the principal under whom they serve. Further, we suggest two more specific hypotheses. First, the most dramatic effects of perceptions of leadership and principal's gender are hypothesized to be between male and female teachers' reports of classroom influence and collegiality. The literature is quite consistent in finding that female principals spend more time in classrooms and talking to teachers, and are more concerned with teaching than their male counterparts (Fauth, 1984; Gilbertson, 1981; Gross & Trask, 1976; Pitner, 1981). We argue that such behaviors carry different meanings for male and female teachers. Moreover, this type of leadership (defined earlier as part of empowerment) counters the tendency that teachers have to maintain autonomy by isolating themselves. Interestingly, Wheatley (1981) notes that female teachers often form informal groups of colleagues in the school as a way to gain rewards from teaching not accessible in other ways, while men have generally not needed to turn to these groups. The consequence may be that male teachers, relatively unaccustomed to close teacher-teacher or teacher-principal interactions, don't find them supportive; whereas women are more familiar with and respond more positively to this type of leadership.

Our second specific hypothesis concerning this research question concerns individual power, which we suggest is related more strongly to perceptions of leadership than to gender (of either principal or teacher). We draw this hypothesis from from the literature on empowering leadership. Several leadership practices of interest in this study are identified by Conger and Kanungo (1988) as enhancing feelings of self-efficacy: expressing confidence in subordinates accompanied by high performance expectations (House, 1977); fostering opportunities for participation in decision-making (Block, 1987; House, 1977; Kanter, 1977); providing autonomy from bureaucratic contraint (Block, 1987); and setting inspirational or meaningful goals (Block, 1987; Burke, 1986).

Method

Sample and Data

The data for this study were drawn from High School and Beyond (HS&B), a general-purpose survey of America's high schools. Our sample includes 8,894 teachers (44% female) and 377 principals (10% female) in the 377 high schools that were included in the Administrator and Teacher survey (ATS) conducted in 1984 (Moles, 1988). The original purpose of the ATS was to collect data relevant to characteristics of effective schools, as identified in the literature. Data were collected from a random sample of 30 full-time teachers in each high school who spent the majority of their time teaching major subjects. If a school employed less than 30 teachers, all teachers were sampled.

We have restricted the ATS school sample, a random subsample of the 1,015 schools in the original HS&B study, to include only those schools with at least 10 sampled teachers. Of the 377 schools included here, the large majority (82%, or 309 schools) are public. Of the 68 private schools, most (69%) are Catholic schools. Full details of the ATS study are available elsewhere (Lee & Smith, 1990; Moles, 1988; Newmann, Rutter & Smith, 1989). Given the sampling design for schools and teachers in ATS and HS&B, and using the HS&B design weights to adjust for stratified sampling, results may be generalized to American secondary principals and teachers. While sample sizes are reported unweighted, all means and estimated parameters reported here employ the design weights.

Measures

Dependent measures. All outcome variables are factors created from individual items from the ATS teacher survey. Appendix A describes the psychometric characteristics of each factor, the individual ATS items included in each, and the components' factor loadings. All dependent variables are standardized, with a mean of zero and a standard deviation (sd) of one. The intermediate dependent measure, teachers' perceptions of effective leadership, includes 11 items and has high reliability (alpha =.91). This variable is identical to the measure of effective leadership used in the Lee et al. (1991) and Newmann et al. (1989) studies, although those studies aggregated the measure to the school level.

The set of final dependent measures includes five factors which tap the three levels of teachers' power. The two measures of teachers' organizational power have moderate reliability. Staff influence over school policy (a 4-item factor with alpha=.72) includes measures of staff influence over such policies as student behavior codes, inservice programs, instructional grouping practices, and curriculum. Control over classroom practice (a 5-item factor, alpha=.72), queries the amount of control teachers have over practices in their classrooms such as content, teaching techniques, teaching materials, discipline, and homework. A single factor taps teachers' interpersonal power -- staff collegiality and support (7-item factor with alpha reliability of .70). The measures includes time spent with other teachers on school-related activies; support from colleagues; shared beliefs and values about school's mission; acceptance by staff; cooperative effort; knowledge of other teachers' classes, and perceived atmosphere of the school as a family.

Two factors tap teachers' personal power with more modest reliability. Self-efficacy (a 4-item factor, alpha=.65), includes measures of teachers' feelings of success; looking forward to work; satisfaction with work; and how seldom teachers feel it is a waste of time to do their best. Locus of control (5 items, alpha=.67) taps teachers' perceptions of whether their success results from factors they control; interferences with work by non-academics, tardiness, class-cutting; and how much students' attitudes and habits affect their chances for success.

Independent measures. Important constructs to this study, gender of teacher and gender of principal, are measured by these individuals' sex. Besides those variables, our multivariate analyses employ statistical

control for years of teaching experience and annual salary, two teacher characteristics which have been shown elsewhere to be related to several teacher outcomes. Both came directly from the ATS data. In addition, we investigated the possible confounding effects of several other characteristics of schools and teachers. School measures we considered include sector (public, Catholic, private), school size, student body composition (racial/ethnic concentration, average SES), average achievement levels, and length of service for the principal. Additional teacher characteristics which we considered include subject taught, education level, and age. Each variable in this second set was subsequently dropped due to non-significant relationships with the set of dependent measures and the covariates of interest (i.e., gender of teacher and principal).

Analytic Method

The major analytic technique used in this study was two-way analysis of variance (ANOVA). We selected ANOVA for several reasons. First, the independent variables of interest are both categorical (gender of teacher and principal), while the dependent variables are normally distributed continuous measures. Second, the literature concludes that the relationship of teachers' gender to perceptions of power and, especially, to perception of effective leadership, may be different for male and female principals. This suggests the presence of an interaction between teacher gender and principal gender. ANOVA is a particularly useful procedure for detecting and testing interaction effects. Third, two-way ANOVA allows the inclusion of controls for confounding variables. As stated above, we have adjusted all results for both teachers' experience and salary, as these variables were systematically related both to teacher gender and to several of the dependent variables. In addition to ANOVA, we also used OLS regression with dummy-coded independent variables to compute adjusted means.[1] While ANOVA results include group means as well as standard statistical tests, the adjusted means from ANOVA do not take into account interaction effects. As stated, these interactions comprise important hypotheses in this study.

Analysis proceded in two steps, due to two analytic models shown in Figure 1 and the two research questions posed earlier. The first model (Model A, Figure 1) employs perceptions of leadership as the outcome, with teacher and principal gender as independent variables and includes the two

teacher control variables. The second set of models (all typified by Model B, Figure 1) investigates the five measures of teacher power. Again, these analyses included the two independent gender variables. However, for this second set of analyses, control variables were of two types: the two teacher covariates used in the first analysis (salary and experience) plus a statistical control for perceived leadership. In other words, gender differences in teachers' sense of personal, interpersonal, and organizational power were estimated after taking their judgments about principals' leadership into account. As explained earlier, we introduce this additional control precisely because prior studies have suggested that teachers may judge the leadership of male and female principals differently.

Results

Unadjusted Results for Leadership and Power

Table 1 presents sample sizes and means on all dependent measures, and the two control variables, for the four analytic groups in this study: male and female teachers working for male and female principals. Clearly, most teachers work for male principals, since 90% of the prinicipals in this random sample of U.S. high schools are men. The proportion of male and female teachers working for principals of each gender, while not nearly so unbalanced as the distribution of principals, shows some tendency to match genders. That is, while 43.2% of the teachers working under male principals are female, 59.7% of the those working in schools headed by females are women. We tested three pairs of group mean differences for statistical significance: (a) between teachers in schools with male and female principals; (b) between male and female teachers in schools with male principals; and (c) between male and female teachers in schools headed by females. All noted differences are significant at the $p<.01$ level. Because of the coding of outcome variables, displayed differences are in standard deviation units, or effect sizes.

Insert Table 1 about here

Male-female differences with women principals. One trend in these mean differences is striking and consistent. For every dependent measure, there is a significant difference between the means of male and female teachers

working for female principals, with male teachers' means considerably below those of their female teaching counterparts. That is, male teachers assess the leadership of female principals they work for as relatively ineffective, while female teachers assess the effectiveness of that leadership above average (an effect size for the difference of .26 sd). The same trend is seen on all levels and all measures of teacher power, with particularly marked differences in staff collegiality and support (.36 effect size for the difference) and for control over classroom practice (.39 effect size for the difference). This is especially noteworthy when we consider that, by and large, these male and female teachers are probably working for the *same* principals.

Certain components of these composite factors appear to be especially important. Appendix B displays the means for the 4 analytic groups on each component of the 6 dependent measures. For example, in regard to leadership, male teachers seem to feel especially unsupported and discouraged (T19Y) and decry the lack of recognition of good work by female principals (T19O), whereas female teachers are particularly favorable about the innovative ideas (T19JJ), communication of goals and expectations (T19R), and encouragement to experiment (T19T) afforded by the female principals for whom they work. Some components of the measures of organizational power also show striking differences. Male teachers feel especially disenfranchized in schools headed by female principals in regard to staff participation in decision-making (T19Q), and the influence of teachers on student discipline (T02D) and homework policies (T02E). On the other hand, female teachers feel especially empowered in schools headed by women in regard to their influence on the school's policies on behavior codes (T01A) and ability grouping (T01C), and teachers' influence on student discipline. Male-female differences are less marked in the components of factors measuring personal and interpersonal power.

Other differences. As we predicted, the mean differences on these measures between male and female teachers working for male principals (in Table 1) are less striking (only 3 of the 6 sets of means are significantly different). The same general trend is apparent, however, with male teachers assessing both the principal's leadership and their own power somewhat less positively than their female teacher counterparts. Significant differences favoring female teachers are evident for perceived leadership, collegiality, and control of classroom practice -- the variables where the largest

differences were also seen in schools headed by female principals. This finding supports our hypothesis that the most dramatic differences would be found in classroom control and collegiality. On only a single outcome, control of classroom practices, do teachers working for male and female principals differ on average, with the difference favoring male principals very slightly (certainly driven by the especially low rating for male teachers working for female principals on this factor). The means shown in Table 1 offer strong support for the presence of the interaction between gender of teacher and of principal which we hypothesize. We turn to our multivariate analyses to investigate this further.

Analyses of Variance

Effective leadership. Results from each of the ANOVA models described above are presented in Table 2. Recall that each of these ANOVAs includes adjustment for teachers' salary and experience. While statistical significance of all model variables are presented, we focus our discussion on the two main effects -- teacher gender and principal gender -- and on the interaction between them. Following ANOVA procedures, each effect is tested with an F-statistic, all of which have at least (1, 8198) degrees of freedom. Table 2A presents results for the analysis of perception of the principal as an effective leader (Model A, Figure 1). There is a significant main effect in effective leadership for teacher gender ($F=11.0$, $p<.001$), but none for principal gender. However, as hypothesized, there is also a significant effect ($F = 18.1$, $p<.001$) for the teacher-by-principal gender interaction.

Insert Table 2 about here

Perceptions of power. In each analysis for the various measures of teachers' perceptions of power (Tables 2B-2D, based on Model B in Figure 1), we take into account teachers' assessments of the effectiveness of the leadership in their schools. In every case, the effect of this covariate is very large and statistically significant at the $p<.001$ level. This is because, in fact, assessment of leadership is strongly and positively related to both male and female teachers' perceptions of their own power in all domains. That is, results are consistent regardless of whether the power is exercised at the organizational, interpersonal, or personal level.

Correlations between perceptions of effective leadership and the various measures of power range from a low of about .25 with classroom control to a high of about .5 with colleagiality.

For the two measures of personal power (Table 2B) -- locus of control and self-efficacy -- the two main effects for gender are non-significant, while again the interaction of teacher-by-principal gender is significant ($F=8.1$, $p<.01$ for locus of control; $F=3.3$, $p<.05$ for efficacy). Perceptions of the effectiveness of the principal's leadership is especially strongly related to both measures of personal power, supporting our hypothesis. The measure of interpersonal power (collegiality) shows the same pattern seen for leadership (Table 2C). That is, the main effect of teacher gender is significant ($F=13.1$, $p<.001$), the principal's gender is non-significant, but the interaction term is significant ($F=5.5$, $p<.05$). For neither measure of organizational power (Table 2D), staff influence over school policy and teachers' control over classroom practice, is the effect of teacher gender significant. In fact, of the 6 dependent measures considered here, only for control over classroom practices is principal gender significant as a main effect ($F=11.2$, $p<.01$). On both of these measures, as well as all the others, the interaction term is again significant at the $p<.001$ level.

Adjusted Means for Leadership and Power

Clearly, our sturdiest findings here are the significant interaction effects on the measure of effective leadership and on all measures of teachers' power, even when consistently significant differences in perceptions of leadership were taken into account. These significant interactions indicate that the effect of teachers' gender on these outcomes differs, depending on whether the teachers work under male or female principals. While the direction of these effects was suggested by the unadjusted means for the four analytic groups from Table 1, the ANOVA tables presented in Table 2 do not indicate the direction of these effects. As described, since group means shown with ANOVA do not take into effect the interaction between the main effects, we have employed OLS regression to compute these adjusted means. They are presented in Figures 3A-3F. We selected a graphic display mode here in order to underscore the meaning of the interaction. By magnifying the scale on which each dependent measure is plotted (the vertical axis), the difference in the slopes of the lines for male and female teachers working for principals of each gender is highlighted.

Insert Figures 3A-3F about here

Effective leadership. It is clear from Figure 3A that while male and female teachers assess the leadership of the male principals they work for as almost equally effective, there are large differences between male and female teachers who work for female principals. In fact, the effect size of the difference is somewhat larger than the unadjusted difference shown in Table 1 (over .4 sd). That is to say, while female teachers find the leadership of their female principals quite effective, male teachers in such schools consider their leaders relatively ineffective.

Personal power. Figures 3B and 3C display the adjusted means for our two measures of personal power. Recall that these figures include statistical adjustment for effective leadership, which we saw from the ANOVA tables was very strongly associated with these outcomes. While the interactions between teacher and principal gender still show substantial differences between the personal power male and female teachers experience when working for female principals (with considerably fewer differences for those working for male principals), the pattern of effects is somewhat different here. That is, once differences in perceptions of leadership are taken into account, both male and female teachers appear to be empowered when working for female principals. This is particularly marked for teachers' self-efficacy, less so for locus of control. Nevertheless, in both cases, female teachers experience exceptional personal empowerment under female principals.

Interpersonal power. Although the mean differences for collegiality are also adjusted for differences in leadership effectiveness, the pattern is somewhat different here (see Figure 3D). First, women teachers (regardless of the gender of the principal) assess their interpersonal power as considerably greater than male teachers, a finding which confirms existing research on this topic. However, the now-familiar pattern is again in evidence: while female teachers experience interpersonal empowerment working in schools headed by females, male teachers working in such environments feel especially curtailed in this regard.

Organizational power. Adjusted means for perceptions of staff influence on school policy for the four analytic groups are shown in Figure 3E. As we saw for self-efficacy, male and female teachers show almost identical

perceptions of this organizational power measure when working for male school heads, but teachers of both genders consider staff influence on policy to be greater in schools headed by females. Moreover, it is particularly in schools headed by women where women teachers think the staff has great influence on school policies. On the other hand, on another measure of organizational power, teachers' control over classroom practices, we see the same phenomenon shown earlier for collegiality. That is, women teachers in general consider themselves to have more control over events in their classrooms, regardless of the principal's gender. In schools where the principal is female, however, males feel especially powerless in this regard, whereas women teachers in such schools consider themselves particularly empowered.

In general, whether considering perceptions of effective leadership or various levels of power with the school, male and female teachers evidence rather different perceptions if they work in schools headed by women, but rather similar perceptions when working under male principals. While female teachers see themselves as particularly empowered by serving under women principals in the case of collegiality and control in the classroom, male teachers believe they are less empowered than when working for male principals.

Discussion

A troubling finding. This study has examined perceptions of leadership and power for secondary school teachers. Clearly, the measures we have employed here are not objective measures of either leadership or power, but rather tap teachers' subjective attitudes and judgments about the principals, staff, relationships, and conditions of work in their schools. However, one finding from this study is objective and not perceptual. The fact that 90% of the leadership of secondary schools in the United States in the mid-1980s is male, when close to half the teachers are female, troubles us greatly. As the teaching force is the major recruiting ground for the principalship, it would appear that the pool of potential candidates for this job is adequate to create a more equitable distribution of successful candidates. In an era where the push toward gender equity in our society is strong (especially in education), in organzations which are operated largely at public expense and wholly in the public interest

(schools), what sort of a message does this send to the clients (secondary school students)? We reluctantly abandon this topic to the inquiry of others, as recruitment of principals is not the focus of our inquiry. The serious imbalance in the ranks of the secondary school principalship, however, cannot and should not be overlooked.

Gender differences in leadership style. As was suggested by our literature review, the objective leadership styles of male and female principals have been found to be somewhat different. Women principals are more invested in the details of daily occurrences in schools and the lives of their staff, more visible in hallways and classrooms, and more personally involved in affairs related to the program of the school. These differences are neither more nor less effective by objective standards, as we mentioned earlier. However, the fact that women's leadership styles have been found to be more democratic than the autocratic style more typical of male leaders led Eagly and Johnson (1990) to suggest that, by objective standards, women may be better choices as leaders.

Instead of investigating which style is *better*, we have focused here on the importance of how these behaviors are perceived by those who are led by the leader. An example of this focus is our interpretation of the findings about teachers' control over classroom practices. Others' research has shown female principals to be more active, interested, and involved in the classrooms in their schools than their male counterparts. Our findings confirm the pattern found in earlier research (Petty & Lee, 1975; Shareatpanahi, 1982) that while female teachers welcome such involvement and consider it supportive, male teachers may interpret the same behaviors as intrusions into "their" domains.

Clearly, the daily practices of principals are seen quite differently by male and female teachers. A clear finding from this study is that female teachers like working in environments where their direction comes from female leaders, while male teachers do not. On the other hand, on certain measures of teacher power investigated here -- self-efficacy, locus of control, staff influence over policy -- adjusted means for both male and female teachers were higher when working for female rather than male principals. This could signify that teachers are recognizing real (i.e., objective) differences in leadership style between female and male principals, and are responding positively to female leaders' more participatory style, despite male teachers perceptions of relatively less

effective leadership from female principals.

A direct link between teachers' perceptions of empowerment and their effectiveness as teachers (as measured by student learning) was not the subject of inquiry here, although this link has been both hypothesized and tested by others (Ashton & Webb, 1986; Maeroff, 1988; McLaughlin et al., 1990; Rosenholtz, 1989). However, we believe that the findings we have described here would be important, even if there were no link between these attitudes and teachers' effectiveness. We want to underscore here the consistency of our findings about how strongly and positively female teachers respond to female leadership. In American high schools, the days where both sexes prefer men as leaders are over.

A self-fulfilling prophecy. We see here a classic vicious circle in educational administration. Since women are typically not groomed for leadership positions, as a result they tend not to aspire to administrative positions or be as visible when leaders are being chosen. When women are so infrequently chosen as leaders, one implication which may be drawn by other women who aspire to leadership positions is that they are not competent or qualified as leaders. Self-esteem may suffer, thus making it even less likely that they will try for the next position. Our results which indicate that female leadership has positive results on female teachers should offer empirical support for the argument that the cycle just described is invalid. It is not just a matter of female leaders providing role models for ambitious female teachers. Rather, our results demonstrate that the increase in female teachers' perceptions of their own power as a result of working for women prinicipals is quite pervasive, increasing at all power levels described here (individual, interpersonal and organizational). They are truly empowered.

Why don't men like to work for women? The second finding from this paper which we wish to highlight is the general failure of male teachers to acknowledge the strengths of the leadership of female principals. Male teachers' ratings of leadership under women are significantly lower than their female counterparts, and yet, their reports of staff influence, locus of control, and self-efficacy increase under women's leadership. What is going on here? Why are men unable to appreciate and feel supported by the leadership of women? One explanation may be that change is resisted in part because the familiar disappears. When men work for female rather than male principals, they experience a change from something they know to

something they don't. Men have relatively little experience with women as leaders. Women too, undergo this change, but women are familiar (and comfortable) with the ways women do things. It is likely that the adjustment in understanding necessary when serving under a female leader is less extreme for women teachers.[2]

A self-serving bias may also orient men against women leaders. That is to say, men have been well served by a system which sustains their own gender in the principalship. Indeed, men have been favored and supported by male leaders in their attempts to rise to administrative positions. It could be the case that men are likely to harbor some fear that when women occupy leadership positions, men will lose their advantage.

We caution against interpreting our findings, or the explanations we have offered, as evidence for keeping women out of principal positions. We argue just the opposite. It has been found that as men gain experience in working for women in non-educational settings, their assessments of women as leaders increases (Heilman et al., 1989; Nieva et al., 1982). We suggest that the solution to diminishing gender differences in empowerment such as we found here lies in making sure that men have exposure to female leaders. This requires, of course, that the numbers of women in leadership positions increase. The optimal solution would be to develop an environment in which men and women have equal experience working for men and for women. The fact that 90% of the leadership of secondary schools in the United States in the mid-1980s was male, when close to half the teachers were female, indicates how far we have to go before we reach this goal of sex equity.

Toward an expanded vision of teacher power. A final finding from this paper which we wish to highlight concerns the complexity and multidimensionality of the construct of power. Our results demonstrate that discussions of "teacher empowerment" are more appropriately directed to specific levels or types of power. Many domains of their work in schools offer teachers the opportunity to feel empowered. Our findings indicate that male and female teachers experience different levels of empowerment depending, at least in part, on whether they work with a female or male principal. That is, women feel empowered in all domains when working for another woman, while men are empowered in only certain domains. Interestingly, men and women feel similar levels of power in all domains (except collegiality) when working for a man. We wish to underline the importance in future research in the area of teacher power to be explicit about the

kind of power involved, and to be wary of making global statements about either the power or empowerment of teachers.

In conclusion, we suggest that future research delve more deeply in two areas. First, research needs to continue to flesh out the complex nature of teachers' power. Through the present study we have begun to expand the dimensions in which teachers may be empowered. The processes through which empowerment develops are still mysterious, though. Second, future research needs to clarify the reasons why men continue to ignore the strengths of women's leadership, when the data show that men are actually empowered in certain domains under female principals. Third, we suggest careful study (most appropriately ethnographic) into the exact processes through which women seem to be denied access to principalships in secondary schools.

Technical Notes

1. This was accomplished by running 4 sets of small regression analyses for each outcome, for each teacher-by-principal gender group, including standardized measures of the control variables. The adjusted mean, in that instance, is the intercept term. These means were plotted to produce Figures 3A-E. Even a subroutine of ANOVA, multiple classification analysis (MCA), does not compute the correct adjusted effects in the presence of an interaction.

2. Another possible explanation is hinted at by the distributions of teachers in schools with male and female principals. A few of the private schools with female principals in this study are girls' schools. Although the faculties of single-sex schools are not themselves single-sex, they are likely to reflect the sex composition of the schools (Lee & Bryk, 1986; Lee & Marks, 1990a). Perhaps it is male teachers in girls' schools who feel particularly emasculated in terms of their power. A large study of single-sex and coeducational independent secondary schools in process (Lee & Marks, 1990b) affords ideal data conditions for exploring this question in that context. We intend to pursue these questions in that context.

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Table 1 Unadjusted Means on Dependent Variables and Covariates for Male and Female Teachers in Schools Headed by Male and Female Principals

Variables	Male Principals n=338		Female Principals n=37	
	Male Teachers n=4,534	Female Teachers n=3,446	Male Teachers n=313	Female Teachers n=464
Perceptions of Leadership[b,c]	-.05	+.01	-.11	+.14
Personal Power				
Locus of control[c]	.00	+.02	-.13	+.12
Self-efficacy[c]	+.01	.00	-.15	+.09
Interpersonal Power				
Staff collegiality and support[b,c]	-.03	+.05	-.15	+.21
Organizational Power				
Staff influence over school policies[c]	+.01	-.01	-.13	+.19
Control over classroom practice[a,b,c]	-.01	+.04	-.32	+.07
Covariates				
Salary	$22,730	$20,102	$24,104	$17,826
Years experience in the school	10.8	8.3	11.9	7.8

[a]Difference between teachers in schools with male or female principals is significant at $p \leq .01$.
[b]Difference between male and female teachers in schools with male principals is significant at $p \leq .01$.
[c]Difference between male and female teachers in schools with female principals is significant at $p \leq .01$.

Table 2 **Analysis of Variance of Perceptions of Leadership and Power for Male and Female Teachers in Schools Headed by Male and Female Principals**

Table 2-A Perception of the Principal as an Effective Leader

Effective Leadership

Source of Variation	DF	Mean Square	F Statistic
Main Effects			
Teacher gender	1	5.25	11.0***
Principal gender	1	1.04	2.2
Interaction			
Principal x teacher	1	4.46	9.3**
Covariates			
Salary	1	1.46	3.1
Experience	1	8.66	18.1***
Explained	5	5.81	12.14***
Residual	8551	0.48	
Total	8556	0.48	

Table 2-B Teachers' Perceptions of Personal Power

Locus of Control

Source of Variation	DF	Mean Square	F Statistic
Main Effects			
Teacher gender	1	0.55	1.5
Principal gender	1	0.22	0.6
Interaction			
Principal x teacher	1	2.94	8.1**
Covariates			
Salary	1	0.08	0.2
Experience	1	0.81	2.2
Perception of principal as an effective leader	1	434.12	1190.8***
Explained	6	73.07	200.44***
Residual	8198	0.37	
Total	8204	0.42	

Teacher Efficacy

Source of Variation	DF	Mean Square	F Statistic
Main Effects			
Teacher gender	1	1.57	2.5
Principal gender	1	0.86	1.4
Interaction			
Principal x teacher	1	2.11	3.3*
Covariates			
Salary	1	0.25	0.4
Experience	1	2.32	3.6*
Perception of principal as an effective leader	1	1011.30	1583.2***
Explained	6	169.33	265.08***
Residual	8198	0.64	
Total	8204	0.76	

Table 2-C Teachers' Perceptions of Interpersonal Power

Staff Colleagiality and Support

Source of Variation	DF	Mean Square	F Statistic
Main Effects			
Teacher gender	1	3.03	13.2***
Principal gender	1	0.13	0.6
Interaction			
Principal x teacher	1	1.26	5.5*
Covariates			
Salary	1	13.42	58.2***
Experience	1	13.71	59.5***
Perception of principal as an effective leader	1	2491.78	10804.6***
Explained	6	419.66	1819.68***
Residual	8198	0.23	
Total	8204	0.54	

Table 2-D Teachers' Perceptions of Organizational Power

Staff Influence Over School Policy

Source of Variation	DF	Mean Square	F Statistic
Main Effects			
Teacher gender	1	0.82	2.3
Principal gender	1	0.19	0.5
Interaction			
Principal x teacher	1	5.46	15.0***
Covariates			
Salary	1	0.00	0.0
Years of experience	1	0.01	0.0
Perception of principal as an effective leader	1	1209.59	3329.1***
Explained	6	203.45	599.95***
Residual	8198	0.36	
Total	8204	0.51	

Teacher Control Over Classroom Practice

Source of Variation	DF	Mean Square	F Statistic
Main Effects			
Teacher gender	1	1.95	2.8
Principal gender	1	7.77	11.2***
Interaction			
Principal x teacher	1	7.18	10.3***
Covariates			
Salary	1	25.83	37.2***
Years of experience	1	17.09	24.6***
Perception of principal as an effective leader	1	349.87	504.4***
Explained	6	66.04	95.20***
Residual	8198	0.69	
Total	8204	0.74	

Appendix A Details of Variable Construction[a]

Independent Variables

Gender of principal

P65 What is your sex? (Responses recoded to 1 = female, 0 = male and matched to the teachers in the school.)

Gender of teacher

T37 What is your sex? (Responses recoded to 1 = female, 0 = male.)

Years of teaching experience

T401 Prior to this year, how many years of experience have you had as a full time teacher at this school?

Annual salary, 1983-1984

T46 What is your annual salary from your school before taxes? (Interval responses were recoded to the midpoint dollar amount.)

Dependent Variables

Perceptions of Effective Leadership

Alpha = .91 Eigenvalue = 6.29 Percent of Variance Explained = 48.4%

Item Name	Factor Loading	Label
T03A	.685	To what extent has the principal or the school head helped you improve your teaching or solve an instructional problem?
T03C	.534	To what extent has other school level administartors helped you improve your teaching or solve an instructional problem
T19I	.650	The principal does a poor job of getting resources for this school (reversed).
T19J	.644	The principal deals effectively with pressures from outside the school that might interfere with my teaching.
T19K	.737	The principal sets priorities, makes plans, and sees that they are carried out.
T19O	.662	Staff members are recognized for a job well done.
T19R	.792	The principal knows what kind of a school he/she wants and communicates it to the staff.
T19S	.721	This school's administration knows the problems faced by the staff.
T19T	.578	In this school, I am encouraged to experiment with my teaching.
T19W	.806	The school administration's behavior toward the staff is supportive and encouraging.
T19Y	.593	The principal seldom consults with staff members before he/she makes decisions that affect us (reversed).
T19HH	.796	The principal lets staff members know what is expected of them.
T19JJ	.773	The principal is interested in innovative and new ideas.

Perceptions of Personal Power

Locus of Control

Alpha = .67 Eigenvalue = 2.20 Percent of Variance Explained = 44.1%

Item Name	Factor Loading	Label
T19F	.512	My success or failure with students is due primarily to factors beyond my control (reversed).
T19G	.741	The level of student misbehavior and/or drug use in this school interferes with my teaching (reversed).
T19P	.707	The amount of student tardiness and class cutting in this school interferes with my teaching (reversed).
T19CC	.736	The attitudes and habits my students bring to my class greatly reduce their chances for academic success (reversed).
T19II	.592	I sometimes feel it is a waste of my time to try to do my best as a teacher (reversed).

Efficacy
Alpha = .65 Eigenvalue = 2.23 Percent of Variance Explained = 55.8%

Item Name	Factor Loading	Label
T17	.674	How successful do you feel at educating students?
T19FF	.799	I look forward to each working day
T32	.817	How much of the time are you satisfied with your job?
T19II	.688	I sometimes feel it is a waste of my time to try to do my best as a teacher (reversed).

<u>Perceptions of Interpersonal Power</u>
Staff Collegeality and Support
Alpha = .70 Eigenvalue = 2.70 Percent of Variance Explained = 38.6%

Item Name	Factor Loading	Label
T13	.261	Since the beginning of the current school year, how much time per month (on average) have you spent meeting with other teachers on lesson planning, curriculum development, guidance and counseling, evaluation of programs, or other collaborative work related to instruction (reported in minutes).
T19D	.697	You can count on most staff members to help out anywhere, anytime -- even though it may not be part of their official assignment.
T19E	.675	Most of my colleagues share my beliefs and values about what the central mission of the school should be.
T19V	.599	I feel accepted and respected as a colleague by most staff members.
T19DD	.802	There is a great deal of cooperative effort among staff members.
T19GG	.725	This school seems like a big family; everyone is so close and cordial.
T19KK	.404	I know the content and goals of other teachers.

Perceptions of Organizational Power

Staff Influence over School Policy
Alpha = .72 Eigenvalue = 2.18 Percent of Variance Explained = 54.5%

Item Name	Factor Loading	Label
T01A	.721	How much influence do teachers at this school have over student behavior codes?
T01B	.699	How much influence do teachers at this school have over the content of inservice programs?
T01C	.751	How much influence do teachers at this school have over student grouping practices for instruction?
T01D	.781	How much influence do teachers at this school have over school curriculum decisions?

Teacher Control over Classroom Practice
Alpha = .72 Eigenvalue = 2.45 Percent of Variance Explained = 49.0%

Item Name	Factor Loading	Label
T02A	.674	How much control do you feel you have in your classroom over selecting textbooks and other instructional material?
T02B	.759	How much control do you feel you have in your classroom over selecting content, topics, and skills to be taught?
T02C	.759	How much control do you feel you have in your classroom over selecting teaching techniques?
T02D	.625	How much control do you feel you have in your classroom over disciplining students?
T02E	.673	How much control do you feel you have in your classroom over determining the amount of homework to be assigned?

[a]All variables come from the High School and Beyond 1984 Administrator and Teacher Survey (Moles, 1988). T-variables come from the teacher file; P-variables come from the principal file.

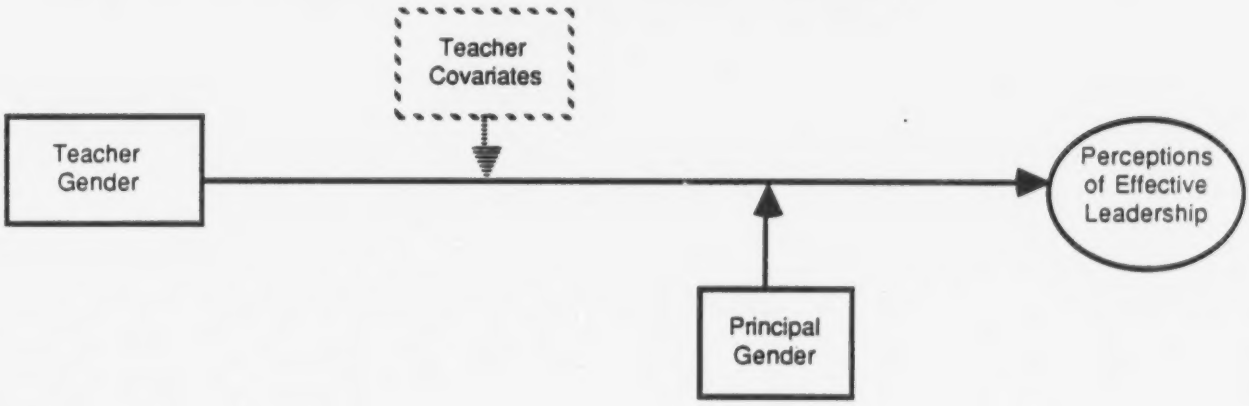
Appendix B **Means for Individual Component Variables Of Dependent Factors for Male and Female Teachers in Schools Headed by Male and Female Principals** (Variables standardized, mean=0, sd=1)

	Male Principals		Female Principals	
Variables	Male Teachers	Female Teachers	Male Teachers	Female Teachers
Effective Leadership Measures				
T03A Principal helped you improve your teaching	.03	.05	-.19	.08
T03C Other school admin. helped you improve teaching	-.11	.07	-.15	.10
T19I Principal does good job getting resources	-.09	.03	-.05	.17
T19J Principal deals effectively with outside interference	-.02	-.02	-.06	.06
T19K Principal sets priorities and has them carried out	-.06	-.01	.00	.18
T19O Staff recognized for job well done	-.06	-.01	-.21	.12
T19R Principal communicates goals and expectations	-.10	-.01	-.14	.20
T19S Prin'l knows problems faced by staff	-.04	-.05	-.06	.14
T19T I am encouraged to experiment with teaching	-.05	.04	-.09	.20
T19W Administration is supportive and encouraging	-.07	.01	-.28	.12
T19Y Principal consults staff before making decisions	-.02	.04	-.11	.15
T19HH Principal lets staff know what is expected of them	-.09	.02	-.06	.14
T19JJ Principal interested in innovative ideas	-.06	.04	-.12	.27
<u>Perceptions of Personal Power</u>				
Locus of Control				
T19F Success due to factors within control	.08	-.08	-.03	-.01
T19G Student behavior doesn't interfere with my job	-.01	.06	-.18	.24
T19L Most students capable of learning material	.00	.07	-.15	.02
T19P Tardiness, cutting does not interfere with my tchg	-.06	.05	-.16	.41
T19CC Stdnt attitudes/ habits do not reduce their chances	-.01	.01	-.18	.20
Teacher Efficacy				
T19II Effort is not a waste of time	-.08	.03	-.09	.15

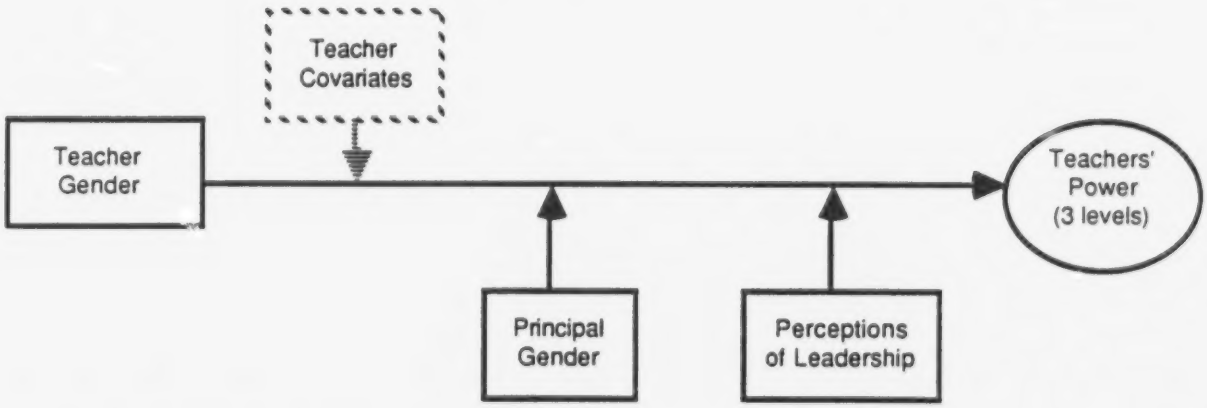
Variables	Male Principals		Female Principals	
	Male Teachers	Female Teachers	Male Teachers	Female Teachers
Locus of Control, contd.				
T17 How successful at teaching students	.04	.05	-.11	.09
T19FF Look forward to each working day	.01	.01	-.13	.01
T32 How much of time satisfied with job	.03	-.03	-.12	.13
Perceptions of Interpersonal Power				
Staff Colleagiality and Support				
T13 Avg time planning with other tchers	-.10	.11	-.08	.21
T19D Can count on other staff for help	.01	.04	-.09	.18
T19E Most colleagues share beliefs/values	-.03	.07	-.12	.07
T19V I feel accepted by colleagues	-.06	.07	-.10	.05
T19DD Much cooperative effort among staff	-.03	.06	-.13	.16
T19GG School like family	.02	.07	-.17	.23
Perceptions of Organizational Power:				
Staff Influence of School policy				
T01A Tchr influence student behavior codes	.01	.01	-.04	.26
T01B Tchr influence content of inservice	.02	-.01	-.06	.11
T01C Tchr influence std grouping by ability	-.05	-.01	-.16	.30
T01D Tchr influence schl curriculum	.04	.00	-.15	.18
T19Q Staff participate in decision making	.02	-.03	-.23	.16
T19Y Principal consults with staff	-.02	.04	-.11	.15
Teacher Control of Classroom Practice				
T02A Tchr influence textbooks for class	.05	-.06	-.11	.09
T02B Tchr influence content to be taught	.05	-.06	-.11	.08
T02C Tchr influence tchg techniques	-.04	.05	-.18	.14
T02D Tchr influence stdnt discipline	-.12	.16	-.29	.22
T02E Tchr influence amount homework assigned	-.05	.07	-.21	.16

Figure 1: Conceptual Models for Teachers' Perceptions of Leadership and Power

Model A: Teachers' Perceptions of Effective Leadership



Model B: Teachers' Perceptions of Personal, Interpersonal, and Organizational Power



KEY

- independent variable of interest
- independent covariate
- dependent variable

Figure 2: Venn Diagram of Orientations toward Power taken in Literature on Organizations

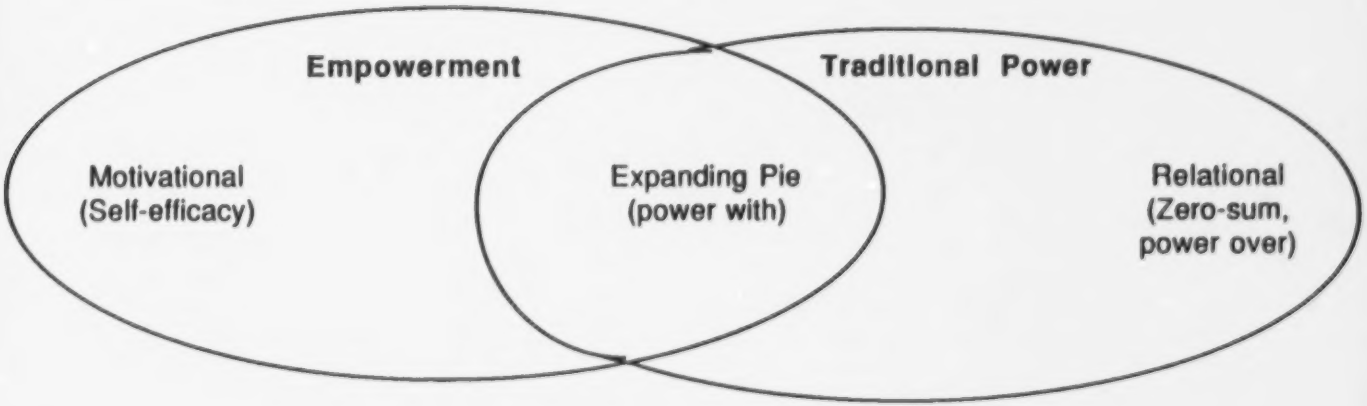


Figure 3A: Adjusted Means for Perceptions of Effective Leadership

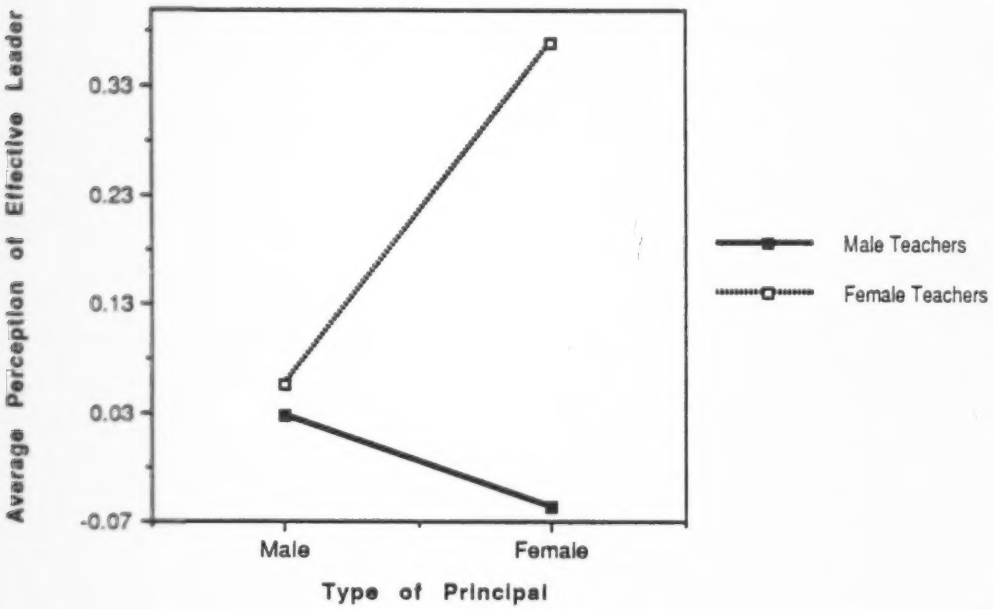


Figure 3B: Adjusted Means for Teacher Locus of Control

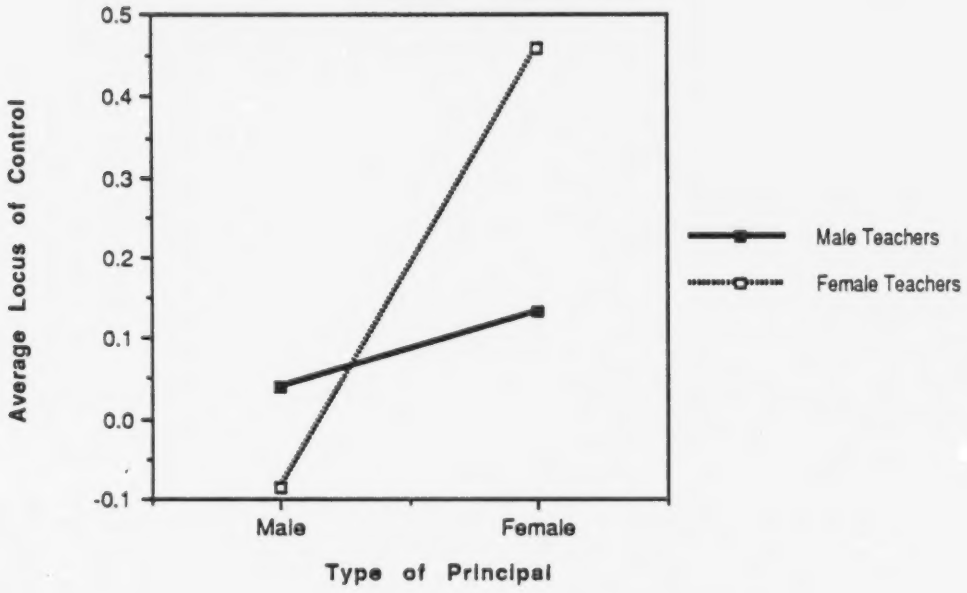


Figure 3C: Adjusted Means for Teacher Efficacy

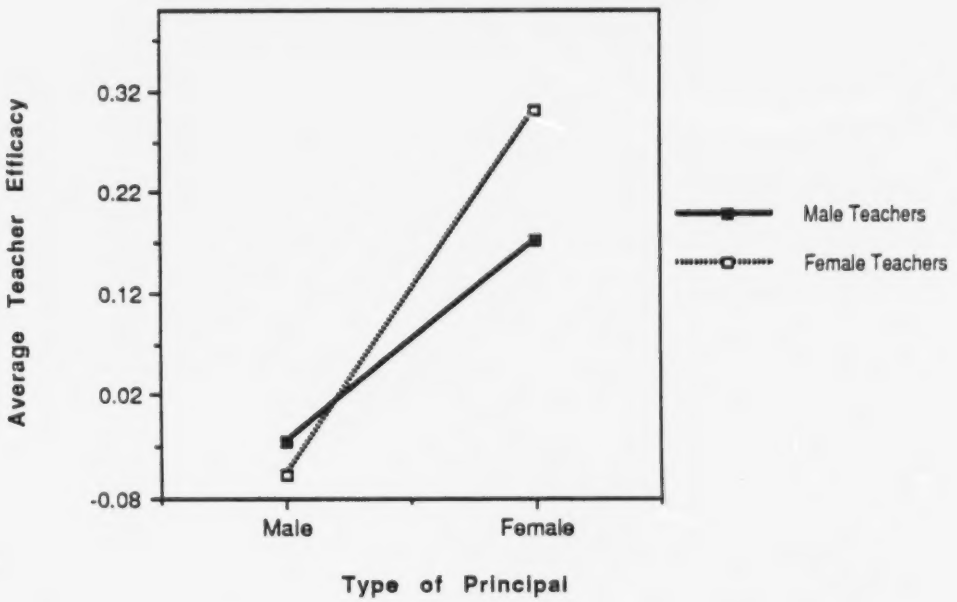


Figure 3D: Adjusted Means for Teacher Collegiality

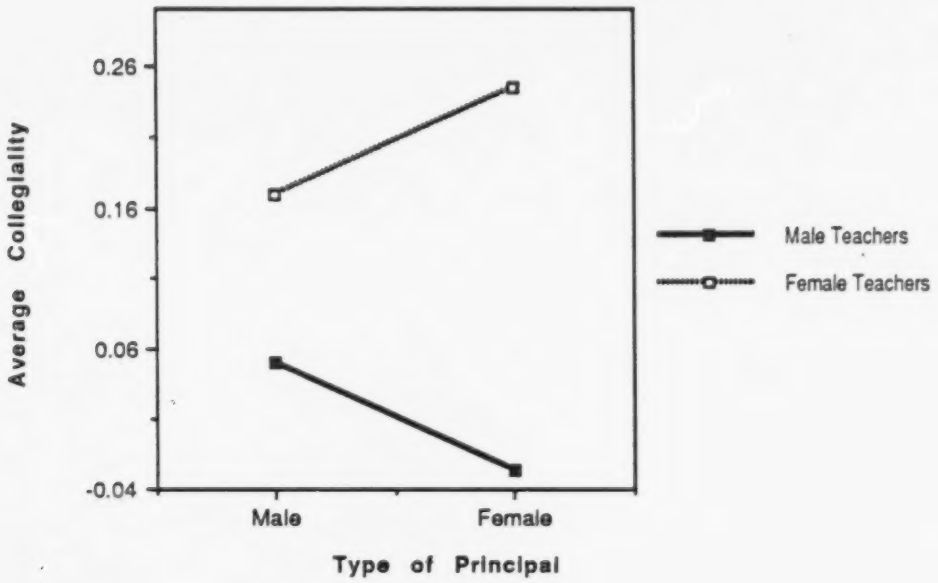


Figure 3E: Adjusted Means for Perceptions of Staff Influence in School Policy

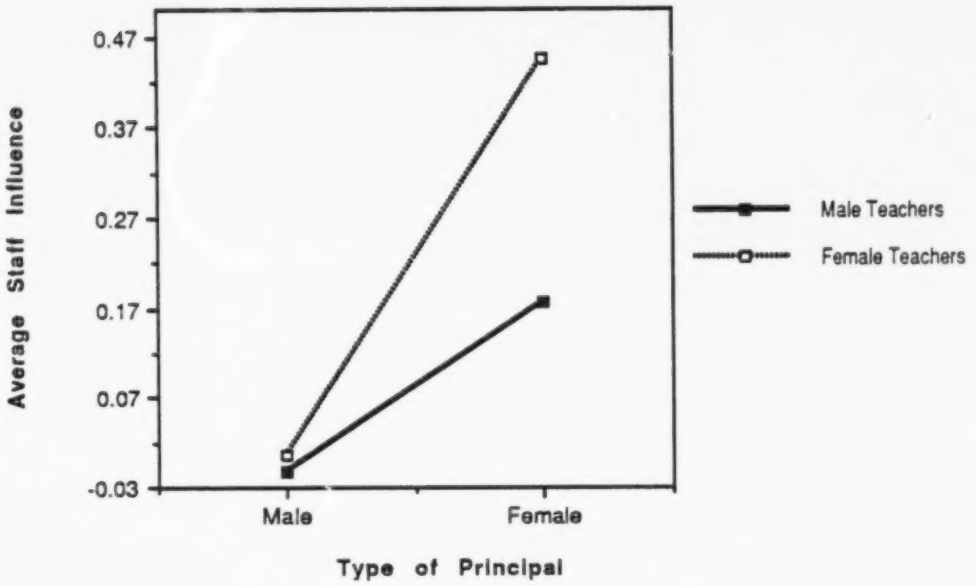


Figure 3F: Adjusted Means for Teacher Control over Classroom Practice